

1. A system for assisting a diabetic subject in controlling blood glucose levels, the system comprising:
  - a. an insulin delivery unit;
  - b. a blood glucose monitor;
  - c. a master module that includes a processor that is configured to receive a blood glucose value from the blood glucose monitor and to run a model that predicts a future glucose value and compares that value with a target value and then predict a dose of insulin that will result in an acceptable blood glucose level; and
  - d. wherein the dose of insulin is transmitted to the insulin delivery unit.
2. The system of claim 1, wherein the processor is configured to receive other data from the subject.
3. The system of claim 2 wherein the data includes information on size and type of meal to be ingested and anticipated duration and intensity of exercise.
4. A system for assisting a diabetic subject in controlling blood glucose levels, the system comprising:
  - a. A first device;
  - b. A blood glucose monitor;
  - c. A master module that includes a processor that is configured to receive a blood glucose value from the sensor and to run a model that predicts a glucose value and compares that value with a target value and then predicts one or more courses of treatment that will result in an acceptable blood glucose level.
5. The system of claim 4, wherein the first device receives a proposed course of treatment for the subject to implement.

6. The system of claim 5, wherein the first device is an insulin delivery device.
7. A tool for assisting a diabetic in achieving glycemic control, the tool comprising:
  - a. A processor configured to model the human carbohydrate metabolism
  - b. An input means for receiving data about the subject
  - c. a proposal generator for proposing one or more courses of treatment that will result in a future blood glucose level being in acceptable range, wherein the processor will only propose a course of treatment if there is a corresponding device present that can carry out the proposed course of treatment.
8. The tool of claim 7, wherein the processor is configured to propose at least one course of treatment includes administering a dose of insulin and wherein that proposal is automatically transmitted to an insulin delivery device.